Seminar on Climate Change and Ecological Resources in California

You are invited to an informal seminar hosted by the California Energy Commission's Public Interest Energy Research climate change research program and the California Department of Fish and Game, on the effects of climate change on ecological resources in California.

FRIDAY, JUNE 6, 2008
10 a.m.
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
First Floor, Hearing Room A
Sacramento, California
(Wheelchair Accessible)

Purpose

A number of ecological changes have already occurred in California over the past century in concert with increases in average temperature and changes in precipitation patterns. Climate change is expected to continue to have a wide range of impacts on California's natural resources and ecosystems. This seminar will provide information on early signs of stress in flora and fauna, predict their response under a range of expected climate scenarios, and discuss ways that land managers can implement effective adaptation to best prepare for these changes. This seminar is open to the public and will provide California citizens and decision makers with the most current research findings on ecological impacts related to climate.

Background

California has an incredibly diverse landscape that ranges from cool, wet forests to hot, dry deserts, from pristine to managed systems, from coastline to mountain ridges. Many of California's varied ecosystems are highly sensitive to changing trends in temperature and precipitation. Currently, spring is beginning earlier, while autumn arrival is being delayed. Change in seasonal timing has serious implications for the life cycles and competitive abilities of numerous species. Earlier spring and autumn bird migration was found in the majority of bird species migrating through and within California. Changing precipitation patterns and soil moisture have altered the suitable range for many species. Many North American flora and fauna have shifted their ranges to the north or to higher elevations. Early spring snowmelts and hotter summers have increased wildfire frequency and conifer mortality in the Sierra Nevada and increased conflicts over water management and allocation. Marine, terrestrial, and freshwater ecosystems alike will face new challenges associated with the synergistic impacts of climate change on existing stressors such as invasive species, fragmentation, urbanization, and wildfire frequency, intensity, and timing. These topics and more will be discussed at this informal seminar.